12.3 State and Local Agencies

STATE OF CALIFORNIA-THE RESOURCES AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF BOATING AND WATERWAYS
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October 29, 2001

Ms. Veronica Petrovsky
Environmental Planner
U.S. Army Corps of Engineers
1325 J Street
Sacramento, CA 95814-2922

Reference: Draft SEIS/EIR for the American River Watershed, California, Long-Term Study

Dear Ms. Petrovsky:

The California Department of Boating and Waterways has funded, and is currently in the process of funding, numerous boating access projects within the American River Watershed used annually by thousands of recreational boating enthusiasts. We have read the draft SEIS/EIR and have the following comments:

1. Alternatives 3 and 4 would raise the dam heights by 7 feet and 12 feet, respectively. The study indicates recreational facilities between 474 and 478 mean sea level will be affected. The study states: "Some of these facilities, including boat ramps, parking areas, and trails, would experience little or no damage if inundated."

   Both Alternatives 3 and 4 would render most boat launching facilities at Folsom Lake unusable by the public for extended periods of time. In addition, restroom facilities with septic systems will be flooded and numerous submerged boating hazards will be created. CDBW-1

2. Stepped releases at the Folsom Dam outlet appear to be an excellent alternative. The current maximum outlet capacity of 30,000 cfs prevents early releases that result in high lake levels that can threaten Department-funded boating facilities. CDBW-2

3. The higher lake levels projected under some alternatives are likely to affect the Department-funded vault toilet at the Skunk Hollow whitewater take-out on the American River. CDBW-3

4. The higher releases into the lower American River Parkway will likely affect Department-funded restroom facilities on the Parkway. CDBW-4

Thank you for the opportunity to comment on the draft SEIS/EIR.

Sincerely,

Steve K. Watanabe
Senior Engineer

c: Mike Ammon

12.3.1 CDBW – California Department of Boating and Waterways, Steve K. Watanbe (October 29, 2001)

Response to Comment CDBW-1

The Corps recognizes the California Department of Boating and Waterways' (CDBW) concern that Alternatives 3 and 4 could potentially damage and prevent public use of many boating facilities at Folsom Reservoir. Severe storm events that would inundate boating facilities at Folsom Reservoir above 474 feet would occur infrequently, and the duration of inundation would last for a short period of time.

As described on page 7-46, facilities under 474 feet would be inundated under the no-action alternative (Alternative 1); therefore, regardless of which alternative is selected, facilities below 474 feet would be inundated during floodflows. As described on pages 7-4 and 7-5, floodflows under Alternatives 3 and 4 would reduce the total amount of flood storage in the reservoir and result in fewer hours of inundation compared to Alternative 1 (no-project alternative) for smaller floods. Under Alternative 3, the reservoir would fill to the maximum 481 feet only during severe storm events (larger than 1-in-250-year events). Under Alternative 4, the highest water surface elevation would be approximately 487 feet during a 1-in-500 year event. Additional information regarding the frequency and duration of inundation associated with Alternatives 3 and 4 during severe storm events is provided on pages 7-4 through 7-6 and on Tables 7-3 and 7-4.

It is also unlikely that the public would be using boating facilities during flood conditions. Severe storm events have historically occurred during the winter months and coincide with the off-peak recreation season. Flood control operations under Alternatives 3 and 4 would not significantly impact recreation opportunities at Folsom Reservoir because no additional major recreation facilities would be affected compared to Alternative 1 and inundation higher than 474 feet would be infrequent and of short duration (pages 7-53 and 7-54). Facilities impacted by floodflows would also be available for reuse following the storm event. Additional information regarding recreational use of and potential damage to boating facilities during flood conditions is provided on pages 7-52 through 7-54.

The infrequent occurrence and short duration of inundation associated with Alternatives 3 and 4, in combination with the off-peak season in which flood control operations would occur, indicates that operation of these alternatives would not directly affect recreation opportunities at the Folsom Reservoir.

Response to Comment CDBW-2

The Corps recognizes that CDBW supports stepped releases at the Folsom Dam outlet because such operations could prevent flood damage to boating facilities by maintaining lower lake levels during severe storm events.

Response to Comment CDBW-3

The Corps recognizes CDBW's concern that higher lake levels projected under some alternatives could affect CDBW-funded facilities at Skunk Hollow, which is at an elevation below 474 feet. As described on page 7-46, facilities under 474 feet would be inundated under the no-action alternative (Alternative 1); therefore, regardless of which alternative is selected, facilities below 474 feet would be inundated during floodflows. Severe storm events that would inundate Skunk Hollow would occur infrequently, and the duration of inundation would last for a short period of time. Additional information regarding the frequency and duration of inundation associated with each project alternative is described on pages 7-1 through 7-10.

It is also unlikely that the public would be using facilities during flood conditions because severe storm events have historically occurred during the winter months and coincide with the off-peak recreation season. Information regarding recreational use of and potential damage to recreational facilities during flood conditions is provided on pages 7-44 through 7-59.

Response to Comment CDBW-4

The Corps recognizes CDBW's concern that higher releases into the lower American River Parkway could affect recreational facilities on the Parkway. Parkway facilities are already located within the floodplain (i.e., below 474 feet). For this reason, facilities in the Parkway have been designed and are managed to accommodate high flow events. In addition, facilities under 474 feet would be inundated under the no-action alternative (Alternative 1) (page 7-46); therefore, regardless of which alternative is selected, facilities below 474 feet would be inundated during floodflows. Severe storm events that would inundate recreational facilities on the lower American River Parkway would occur infrequently, and the duration of inundation would last for a short period of time. Additional information regarding the frequency and duration of inundation associated with each project alternative is described on pages 7-1 through 7-10.

It is also unlikely that the public would be using facilities during flood conditions because severe storm events have historically occurred during the winter months and coincide with the off-peak recreation season. In addition, because facilities in the Parkway have been designed and are managed to accommodate high flow events, the facilities would be available for reuse following the storm event. Information regarding recreational use of and potential damage to recreational facilities during flood conditions is provided on pages 7-44 through 7-59.

State of California • The Resources Agency
Gray Davis, *Governor*
DEPARTMENT OF PARKS AND RECREATION
Rusty Areias, *Director*
Gold Fields District
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October 29, 2001

Attn: Veronica Petrovsky
U.S. Army Corps of Engineers
Sacramento District
1325 J Street, 13th Floor
Sacramento, CA 95814

Re: American River Watershed Long Term Study

Please find the attached comments (Attachment 1) of the Gold Fields District of the California Department of Parks and Recreation regarding the Draft Supplemental EIR/EIS for the American River Watershed Long Term Study. The Gold Fields District manages Folsom Lake SRA, which includes both Folsom Lake and Lake Natoma. The District is supportive of the objective of bringing greater flood protection to the Sacramento area in the most environmentally sound manner. However, the District does have a number of concerns about the level of analysis, assumptions, findings and mitigation for many resources and uses within the SRA that would be impacted by this project. The District would like to work with project proponents in clarifying and resolving these concerns.

Sincerely,

for Jacqueline Ball
District Superintendent
Gold Fields District

Cc Tom Aiken, Bureau of Reclamation
Butch Hodgkins, SAFCA
Ron Brean, Northern Division Chief, DPR

Attachment 1.

California Department of Parks and Recreation
Gold Fields District

Comments on the
American River Watershed, California Long-Term Study
Draft Supplemental Plan Formulation Report
EIS/EIR, September 2001

The American River Watershed Study has three primary objectives to reduce flood damages to the Sacramento urban area (lower flood risk to an annual exceedance probability of 1-in-200 or less = "200 year protection"), to restore plant, fish and wildlife habitat and other resources in the watershed, and to develop and implementable plan that will receive consensus.

Background
Currently there is 85-year flood protection in Sacramento. The American River Common Features Project (raising and strengthening downstream levees), currently under construction, will increase this to 100-year flood protection. The Folsom Dam Modification Project (enlarging the Dam outlets), already authorized and in preliminary construction, will provide 140-year flood protection. Also authorized is the revision of the Flood Management Plan for Folsom, which has the potential to provide 164-year flood protection.

The Study analyzes seven flood control alternatives, five ecosystem restoration alternatives and a no action alternative. The flood control alternatives include three options for raising Folsom Dam (3.5, 7 and 12 feet), three stepped release alternatives that would increase the release capacity of Folsom Dam (from 115,000 cfs to 160,000 to 180,000 cfs) and one combination of a Dam raise and stepped release.

The California Department of Parks and Recreation (DPR) manages the Folsom Lake SRA, which includes both Folsom Lake and Lake Natoma, through a lease agreement with the Bureau of Reclamation. The Departments mission is to protect and preserve natural and cultural resources and to provide opportunities for outdoor recreation. Folsom Lake SRA in is one of the most popular park units within the State Park system with an estimated 2.5 million visitors in 2000. The SRA facilities include a marina, numerous boat ramps, campgrounds, picnic and day use areas, beaches and swim area, and a 100-mile system of trails.

I. Land Use

Consistency with Folsom Lake SRA General Plan
The document states that one of the criteria for significance is whether or not the project is consistent with the Folsom Lake SRA general Plan. The document assumes that impacts from construction related activities are less than significant because all

CDPR-1

construction related activities would occur on federal land, are consistent with existing land use plans (including the Folsom Lake SRA General Plan), and are of short duration.

- DPR disagrees with these assumptions. While the Folsom Lake SRA General Plan does recognize that the SRA functions within the context of a reservoir which is managed for flood protection, water supply and hydropower, the assumption in the General Plan regarding land uses, resources and activities was that these activities would occur under the current high pool elevation of the reservoir. Hence, to say that the project is consistent with the General Plan is not accurate. The Study document also assumes all land around the reservoir is under federal ownership. This is not the case, the State owns land within the SRA around both Folsom Reservoir and Lake Natoma. It is not clear that these state-owned properties would not be impacted by the project. Lastly, the project claims that conflicts with land use are less than significant because the impacts are of short duration. Again, DPR disputes this assumption. Some of the construction-related activities would occur over many years. These activities would impact the primary purposes for which the SRA exists, to protect natural and cultural resources and provide recreation opportunities. The flood control project will need to be considered in the development of the new Folsom Lake SRA General Plan, currently under revision. The consequences for DPR land use planning and the primary purposes of the SRA are significant. DPR would like to work with project proponents to mitigate this impact.

CDPR-1 (Cont.)

Land Ownership - Mississippi Bar

As the document states, most of the land surrounding Folsom Lake and Lake Natoma is under federal ownership (Bureau of Reclamation) and is managed by the DPR as the Folsom Lake SRA. However, the State does own land around both Lake Natoma and Folsom Lake, including a significant portion of Mississippi Bar. It is not clear from the document that the area proposed for borrow site excavation at Mississippi Bar does not include State owned lands.

CDPR-2

- Project proponents need to clarify with DPR the exact location of the proposed Mississippi Bar borrow site excavations.

II. Recreation

Construction-Related Effects (Alternatives 2, 3, 4)

Water-dependent recreation

Despite recognizing the popularity of Folsom Lake SRA as one of the most heavily used units within the State Park system (page 2-19 – 2-22), and acknowledging that construction activities could restrict access to boat ramps, beaches and close roads to popular recreation areas such as Beeks Bight and Dotons Point (page 7-48) the document concludes that construction related effects on water dependent activities would not occur because construction activities would not require lowering the level of the lake.

CDPR-3

This analysis and conclusion are inadequate. Restricting access to beaches and boat ramps at places like Granite Bay, Beeks Bight and Dotons Point will directly impact tens if not hundreds of thousands of visitors to Folsom Lake SRA. DPR provided those who prepared this document with visitor use information by sub-unit within the SRA and yet there is no attempt to quantify the level of impact (number of visitors) the road closures, staging areas and other construction activities will have on water dependent recreation. Also the document makes no mention of the impact that barge traffic from the Peninsula borrow site to the various dike and dam construction sites will have on recreation boating traffic. The document also does not assess the potential impact that restricted access and closures may have on water-dependent concession operators on Folsom Lake, including the Browns Ravine marina.

CDPR-3 (Cont.)

- DPR believes there could be significant impacts on water-dependent recreation at Folsom Lake, as a result of the construction activities. It is incumbent upon the project proponents to display the extent of these impacts and how these impacts will be mitigated.

While the document does recognize the impact the transport of borrow material from Mississippi Bar to Willow Creek will have on the bike path on both sides of Lake Natoma, the document does not address the impact that barge traffic will have on boating use of Lake Natoma. Lake Natoma is very popular for both competitive and recreational rowing, kayaking, canoeing, sailing, swimming and fishing. In addition to the CSUS Aquatic Center, which teaches water sport classes and rents equipment, two other canoe and kayak concessions operate on Lake Natoma (California Canoe and Kayak at Willow Creek and Adventure Sports at Negro Bar). Numerous races and special events are held on Lake Natoma and utilize the portions of the Lake proposed for transporting borrow material. Thousands of water-dependent recreational users could be impacted by the borrow activities at Lake Natoma.

CDPR-4

- DPR believes there could be significant impacts on water-dependent recreation at Lake Natoma, as a result of the construction activities. It is incumbent upon the project proponents to display the extent of these impacts and how these impacts will be mitigated.

Trails

The document recognizes that system trails pass across many of the dikes and dams which would be raised in Alternatives 2, 3, 4 and 8. The document assumes that trail and road closures between Beals Point and Beeks Bight are unavoidable because of lack of alternate routes.

CDPR-5

- DPR is unsure if it is true that the impacts to all of these trails in this area are unavoidable and would expect the project proponents to work with DPR to minimize closures and the impact on recreation users.

The document concludes that construction related effects on recreation at Mormon Island Dam and dikes 7 and 8 would be less than significant because trails across the tops of

CDPR-6

these dams are not part of a continuous trail system (page 7-49). This is incorrect, the trail across Mormon Island Dam is part of the trail that extends from Folsom Point to Browns Ravine and onto Salmon Falls. This is a primary system trail around Folsom Lake.

- The closure of the trail across Mormon Island Dam resulting from construction activities is a significant impact that needs to be mitigated by mitigation measure R-3.

- Further, DPR recommends that as mitigation for the impact of detours and trail closures over several years on trail users across the SRA as part of the construction activities in Alternatives 2, 3, 4 and 8, that project proponents not only re-establish existing trails across the dams and dikes, but also consider additional trail improvements, such as information kiosks, signs and other enhancements to the trail system.

CDPR-6 (Cont.)

An equestrian concessionaire, Shadow Glen Stables, operates on Mississippi Bar, and uses trails located on Mississippi Bar. The document does not address the impact that borrow excavation and transport operations will have on this use and business.

CDPR-7

Mississippi Bar Borrow Site

The document assumes that Mississippi Bar and Willow Creek would be used as a borrow site and for transport of borrow material. This would include excavating 140 acres of land at Mississippi Bar and closure of the Willow Creek recreation site for up to 4 years. Lake Natoma and these two locations are important recreation and natural resources for the Sacramento area. The paved bike paths on both sides of Lake Natoma connect to the American River Bikepath and are used by thousands of bicyclists, runners, equestrians and skaters for recreation, fitness, nature-viewing, and commuting. As previously mentioned Lake Natoma is an important resource for thousands of water-dependent recreation visitors. DPR is currently undergoing a revision of the General Plan for Folsom Lake SRA that will determine objectives and uses of the Mississippi Bar area.

- Because of the unique and importance place of Lake Natoma as a recreation resource in the community, DPR believes project proponents to need to conduct a more rigorous analysis of alternate borrow sites where the impact on the public and public resources would be less.

- Following such analysis, if Mississippi Bar and Lake Natoma are deemed the only viable borrow site, DPR would expect that the Mississippi Bar site would be fully restored according the uses (natural resource restoration and protection, recreation and interpretation) DPR determines for the area in its ongoing General Plan revision. This would include restoring natural habitat and, as mitigation for disruption and impact to recreation activities during construction, construction of recreation facilities such as trails, parking areas, picnic areas and interpretive kiosks (as determined by the General Plan). Further project proponents would need to work with DPR and the CSUS Aquatic Center in planning construction activities to minimize the impact on recreation uses, natural and cultural resources.

CDPR-8

Operation Related Impacts (Alternatives 2, 3, 4)

Folsom Reservoir

Because of the low probability of a flood event that would necessitate utilizing the additional flood storage space that would be achieved in the dam-raise alternatives, the document claims these effects would be less than significant. DPR disagrees with this assessment. The Sacramento area has seen several significant flood events in the past two decades that have made flood control managers, hydrologists and others re-evaluate the probabilities for flood events in the American River watershed. If a flood event were to occur, and DPR facilities were inundated, the impacts to recreation could be significant. This could include damage to facilities from inundation (including DPR employee residences), debris left from flood events, and access to and closure of facilities (including inundation of primary access roads to several major recreation areas) and loss of recreation opportunities during flood events and following clean-up and repair period.

CDPR-9

- DPR believes this potential flood occurrence would be significant effect that needs to be mitigated. DPR recommends a mitigation measure would include project proponent responsibility for clean-up and repair of all recreation facilities impacted by a flood event. Further, DPR recommends that project proponents work with DPR to flood-proof or move recreation facilities that are particularly vulnerable to flood damage.

North and South Fork of the American River

The document states that boating is not allowed on the segment of the North Fork that would be inundated in a flood event is closed to boating. The North Fork of the American River is currently closed ½ mile upstream and downstream from the Auburn Dam foundation (posted order no. 318-01-91). This closure order will change if the proposed PCWA American River Pump Station Project moves forward. This project would install permanent pumps for the Placer County Water Agency at the Auburn Dam site, close the diversion tunnel and restore the river to its historic channel. Closure of the diversion tunnel and restoration of the river would re-open this segment of river to recreation use. A draft EIR/EIS is currently under review.

CDPR-10

- Project proponents need to assess the effects of these potentially overlapping projects, including the impacts on recreation, the PCWA diversion and pump station.

III. Vegetation

Affected Environment

While the Study does an adequate job of generally describing the vegetation types, plant communities and TES species within the project area, because there was little ground survey some important resources that could be affected by the project have been overlooked. This includes several 4-6' diameter valley oaks within the SRA near the end of Lakehills Drive. These significant trees are likely within the proposed inundation zones of Alternatives 2, 3 and 4.

CDPR-11

Effects and mitigation for oak and pine-oak woodlands due to Construction (Alternatives 2, 3, 4)
Because the document does not specify the exact locations of construction staging areas adjacent to the dams and dikes, it is difficult to assess if the acreage of vegetation projected to be lost (Table 7-11) in construction is accurate. Also, because these vegetation acreage are totaled for the entire project, DPR cannot assess how much of this lost vegetation occurs on DPR managed lands.

- DPR recommends that vegetation losses should be mitigated through the acquisition of additional similar habitat on lands contiguous to the existing SRA boundary. DPR should be able to review and approve mitigation plans for losses that occur on DPR managed lands.

CDPR-12

Effects and Mitigation for riparian habitat and wetlands due to Construction (Alternatives 2, 3, 4)
The study proposes developing riparian and seasonal wetlands as mitigation for loss of these resources in construction (page 7-77 and 7-79). Mormon Island Preserve is identified as a potential mitigation site. Creation of wetlands as mitigation has already occurred at Mormon Island Preserve and there is little room to create additional wetlands.

- DPR objects to converting undisturbed uplands habitat into seasonal wetlands as a mitigation measure, which results in a net loss in total habitat. DPR recommends that mitigation should involve acquisition of additional similar habitat on lands immediately contiguous to the SRA boundary. DPR should be able to review and approve mitigation plans for losses that occur on DPR managed lands.

CDPR-13

Determination of Significance and mitigation for vegetation lost due to operations/inundation (Alternatives 2, 3, 4)
DPR does not concur that effects on natural vegetation (including oak and pine-oak woodland) due to potential inundation is a less than significant effect. The assumptions that the criteria for significance (page 7-74) are based on are not necessarily accurate or appropriate. As an example, many of the warm storms that produce major flood events in the American River watershed do not occur in winter, but in March and April, when plants are not dormant but in an important part of their growth cycle.

- DPR concurs with the USFWS recommendation (page 7-78) that the Corps should implement a monitoring program within the expanded inundation zone in these three alternatives. However, this measure should be specified as a mitigation measure and DPR and Bureau of Reclamation resource ecologists and managers should be allowed to review and approve monitoring and assessment plans, baseline conditions, assessment of damages following inundation and determination of mitigation and compensation for losses that occur from inundation. DPR preference for compensation for the loss of vegetation, such as oak woodland, would be acquisition of additional similar habitat on land contiguous to the existing SRA boundary. DPR is aware of several opportunities for habitat acquisition in the lands adjacent to the Peninsula portion of the SRA.

CDPR-14

IV. Wildlife

While the document adequately describes the major habitat types and potential special status species within the project area, there are a few specific important resources that are not mentioned. These include the Anderson Island Preserve on the North Fork arm of Folsom Lake, which is a designated natural preserve within Folsom Lake SRA. Natural Preserves are designated because they contain specific important natural resources and the preserve designation provides the highest level of resource protection within the State Park system. Anderson Island preserve contains heron a rookery. Mormon Island Preserve, on the south side of Green Valley Road near Mormon Island Dam is a second natural preserve within the SRA (which does not appear to be impacted by the project).

CDPR-15

- DPR recommends that specific surveys be conducted in areas of potential habitat for any threatened, endangered, special status or protected species prior to impact inducing activities, including construction staging areas, raising of the dikes and dams, borrow site excavation and material transport, and inundation from a flood event. If protected species are found, appropriate mitigation would need to be developed. As an example surveys should be conducted of tributaries to Folsom Reservoir for Foothill yellow-legged and red-legged frog prior to project implementation and potential inundation.

Construction-Related Impacts (Alternatives 2, 3, 4, 8)
Mississippi Bar is proposed for borrow site excavation operations in three alternatives. The Bar contains important natural resources including, restored ponds (Teichert restored these areas), riparian habitat and a heron/egret rookery. The riparian habitat surrounds these ponds and is also interspersed among the tailing piles throughout the Bar and provides important habitat for resident and migratory species.

CDPR-16

- Further analysis of the specific natural resources at Mississippi Bar needs to be conducted to assess if this is an appropriate borrow site location, and if no other sites are feasible, appropriate mitigation need to be developed to minimize the impact on the natural resources in this area. This would include measures such as avoiding excavation operations during the nesting season at the rookery.

Operation-related Impacts (Alternatives 2, 3, 4, 8)
Anderson I. Preserve, located on the North Fork arm of Folsom Reservoir contains a heron rookery. Alternatives that would raise the dams and dikes would impact Anderson Island during a flood event. The potential impact of this action on these resources needs to be assessed and mitigation developed as required.

CDPR-17

V. Cultural Resources

The draft EIR/EIS appears to adequately document cultural resources within the project area and appropriately finds that impacts to cultural resources from both construction-related and operation-related activities would be significant. DPR generally agrees with the proposed mitigation measures. However, because the Gold Fields District has not

CDPR-18

the proposed mitigation measures. However, because the Gold Fields District has not seen the Programmatic Agreement for this project, our recommendation is that prior to any impact inducing activity, such as construction staging areas, borrow site excavation or inundation, areas should be surveyed, sites recorded and evaluated and appropriate mitigation developed.

CDPR-18 (Cont.)

Mississippi Bar

DPR is concerned that the proposed construction activities may impact historic tailing piles at Mississippi Bar and the Willow Creek area. The tailings are an important historic feature (some may be part of a NHRP eligible site) and for which DPR has considered developing permanent interpretive facilities (information kiosks, etc). DPR would like to work further with project proponents in assessing the proximity of these historic resources to the proposed borrow site activities and how to protect the key resources.

CDPR-19

VI. Visual Resources

DPR is concerned about the impact of the project on the visual resources within the SRA. First, there is insufficient detail in the document to support the conclusion that excavation of material at Mississippi Bar would have a less than significant impact on that area. The visual quality of the Lake Natoma Basin is an important resource which the State Park and Recreation Commission has specifically directed the District to protect. Second, the document assumes that inundation of vegetation around Folsom Reservoir would not result in a loss of this vegetation. This assumption is not necessarily correct and may also be based on incorrect assumptions, as noted in the comments on vegetation. Inundation could result in the loss of this vegetation and change the visual quality of the shoreline around the Lake. Given the extent of the shoreline this is a potentially significant impact that would need to be mitigated.

CDPR-20

VII. Traffic, Circulation and Public Safety

DPR is concerned that the analysis of effects of the construction portion of the project on traffic and circulation may underestimate the impacts of construction traffic, particularly heavy trucks on traffic on Folsom-Auburn Road. Traffic is currently congested not only during peak commute hours but also on peak summer weekends due to recreation traffic into Beals Point and Granite Bay. DPR would like the opportunity to work with project proponents on the routing of construction traffic, traffic management planning, public safety management planning and other mitigation measures to address traffic impacts. Traffic impacts affect the ability of DPR law enforcement staff to respond to emergencies within the SRA and hence become a public safety concern.

CDPR-21

VIII. Ecosystem Restoration and Recreation Enhancement

One of the objectives of the project is to restore plant, fish and wildlife habitat and other resources in the watershed. The document proposes five ecosystem restoration alternatives to meet this objective. Each of these restoration alternatives is located or benefits resources in the Lower American River, downstream of Nimbus Dam. The impacts of Alternatives 2, 3, 4 and 7 are primarily upstream of Nimbus Dam, including impacts to cultural and natural resources and recreation. Further the project benefits, flood protection, are directed at populations and properties downstream of Nimbus Dam.

CDPR-22

seven-foot dam raise. There is an inherent inequity in a project that directs all of the benefits (flood protection and restoration) downstream, and in which all of the impacts are incurred upstream.

- DPR believes that project proponents should develop ecosystem restoration and recreation enhancement projects around Folsom Lake and Lake Natoma which will benefit the communities in areas which will bear the burden of project impacts (upstream of Nimbus Dam) in Alternatives 2, 3, 4 and 7 (including the likely locally preferred alternative). DPR would like to work with project proponents in developing these restoration and enhancement proposals. These restoration and enhancement proposals should be consistent with the Folsom Lake SRA General Plan, currently under revision. Examples of projects would include: 1.) acquisition of properties adjacent to Folsom Lake SRA which would provide additional recreation opportunities, open space and additional habitat to the SRA above the elevation of potential inundation; 2.) improvement and development of recreation facilities within the existing SRA including a second marina, improvements and additions to the trail system, a second activity center, a lifeguard tower and other facility related projects.

CDPR-22 (Cont.)

12.3.2 CDPR – California Department of Parks and Recreation, Jacqueline Ball (October 29, 2001)

Response to Comment CDPR-1

The project will not alter the existing gross pool elevation for Folsom Lake and therefore will not conflict in this regard with the Folsom Lake SRA General Plan. As the project progresses into the pre-construction, engineering and design phase, the project proponents will coordinate closely with DPR staff to ensure consistency with other aspects of the SRA General Plan. To minimize construction related impacts, improvements to Dikes 1-4 and 7 and 8 will be constructed outside of the Memorial Day through Labor Day peak recreation season. Work at the other sights will be required during the peak recreation season. To the extent practical, this work will be limited to weekdays. The local sponsor (SAFCA) will work with DPR to ensure that planed project construction and operation activities are considered in the development of the new Folsom Lake SRA General Plan.

It is recognized that the project will impact DPR's planning effort. It is also recognized that the existing SRA general plan assumes that elevation 466 is the maximum water surface elevation under existing conditions. While it is true that this elevation has not been exceeded to date, the reservoir spillway design flood pool elevation is 475.4 feet. Therefore, increases in water surface elevation above 466 would not be consistent with the SRA General Plan. However, the increases in water surface elevation will be very infrequent (1/150 chance in any year) and therefore less than significant.

Additionally, SAFCA will compensate DPR up to $50,000 for increased efforts associated with the development of a new General Plan for the Folsom Lake SRA, providing DPR can reasonably demonstrate that the increased effort is the result of activities associated with this project. SAFCA is providing these funds independent of the project and this effort will neither be cost-shared nor creditable to the project.

Response to Comment CDPR-2

Excavations at the Mississippi Bar borrow site are currently planned to occur entirely on Federally-owned land comprising approximately 140 acres as shown in the attached figure. It is recognized that ingress/egress will occur on State land.

Response to Comment CDPR-3

Project construction is unlikely to reduce access to beaches and boat ramps around Folsom Reservoir for water-dependent recreation activities. As noted above, the work will be limited to weekdays during the peak recreation season. Use of barges to transport material from the Peninsula borrow site to construction locations around the lake is not expected to significantly affect boating or other water-dependent activities due to timing of work during the off-peak season; working on weekdays only, and the low number of barge trips that will be made per work day. Boaters and recreationists will be able to avoid the slow moving barges.

The project does not currently involve the closure of the boat ramps or their accesses. However, should limited short duration closures be required, they will be fully coordinated with DPR and appropriate mitigation identified.

Section 7.6.5 has been revised to include a discussion explaining why the use of barges would not affect boating or other water-dependent activities at the Folsom Reservoir.

Response to Comment CDPR-4

Borrow material removed from Mississippi Bar will be conveyed over the bike path or flagmen will be used to temporarily halt bicycle traffic when material needs to cross the path. The borrow material will be barged across Lake Natoma to a construction staging area west of Willow Creek where it will be loaded onto trucks and moved along local roadways to construction sites around Folsom Reservoir. This operation is expected to generate 3–4 barge trips per day. These trips will be scheduled for weekdays only, will occur as much as possible outside of the peak recreation season, and will be specifically designed to minimize the inconveniences associated with temporarily halting boating traffic in the shipping lane established for the barge operation. Alternate access, other than Willow Creek, will be considered if the Mississippi Bar will be used for borrow material. Appropriate environmental coordination and documentation will be performed if changes are made in the future to the borrow staging area.

The aforementioned text has been added to Section 7.6.6.

Response to Comment CDPR-5

Construction impacts associated with raising Folsom Dam would be temporary in nature. Managing the timing and phasing of construction and providing alternative recreational facilities as appropriate to avoid or offset potential reductions in daily use projections for the affected areas will mitigate impacts to recreation at Folsom Reservoir during the construction process. Trails that are subject to temporary closure will be temporarily relocated during the project construction process and their location and design will be developed in cooperation with DPR. These trail detours will remain in use for short periods (less than one year per detour) and, to the extent feasible, will occur outside of the peak recreation season. Trail detours at Dikes 5 and 6 and Mormon Island will likely occur during the peak recreation season. The project sponsors will work closely with DPR staff to develop a detailed detour strategy as the closure requirements are better defined during the pre-construction engineering and design phase of the project.

Section 7.6 has been revised to reflect the aforementioned text.

Response to Comment CDPR-6

Establishing a trail detour south of the dam using an existing unpaved maintenance road would offset closure of the trail across Mormon Island Dam. The project sponsors will coordinate closely with DPR in developing trail detours that could be converted into permanent trail improvements at the close of the construction process as well as working with DPR on recreation improvements.

Response to Comment CDPR-7

Activities at the Mississippi Bar borrow site are not expected to impact use of the horse stables in the area. The trail between the bar and Lake Natoma would remain in service during the borrow operation. Material would be conveyed from the borrow site to lakeside transport barges by truck or automated conveyor. The conveyor system would be designed to pass over the trail. Flagmen would control any trucks crossing the trail. Alternative equestrian trails will be provided to the extent that trails used by the stables are impacted.

The aforementioned text has been added to Section 7.6.6.

Response to Comment CDPR-8

A feasibility level analysis of borrow site alternatives was performed as part of the current phase of the project planning process. This analysis indicated that most of the material needed to raise Folsom Dam could be obtained from Federally owned land near the Peninsula Campground. Analysis was also performed for the Mississippi Bar site in the event that additional borrow material would be required. Project costs were developed for the Mississippi Bar site assuming two load and unload cycles: one to barge the material across Lake Natoma and one to truck the material to construction sites around Folsom Reservoir. Because of the expense of this operation, alternatives to the Mississippi Bar site will be carefully re-examined during the pre-construction engineering and design phase of the project. Final site selection will be based on several considerations including cost, operational flexibility and local acceptability.

The project sponsors will coordinate closely with Lake Natoma recreation and neighborhood interests, including DPR, in developing a detailed plan for the borrow operation and the subsequent reclamation of the borrow site and construction staging areas. DPR is currently initiating a 1–2 year planning process to update the General Plan for the Folsom State Recreation Area (including Lake Natoma). Local acceptability and consistency with DPR's general plan for the area will be important considerations in determining whether Mississippi Bar remains a focal point for meeting the borrow needs of the project.

Response to Comment CDPR-9

Current flood control operations could result in temporary water storage up to elevation 475.4 in a very large flood event. Most DPR facilities are located between elevation 468 and 474. A flood large enough to inundate these facilities has not occurred in the American River watershed in the last 100 years. The proposed project combined with recently authorized improvements to Folsom Dam will reduce the probability of such inundation. Conversely, by

raising the dam, the proposed project will create a small risk that recreation facilities in the area between elevation 474 and 482 could be flooded. Since most of DPR's facilities are in the 468 to 474 zone, and since the likelihood of flooding in this zone is greater than in the 474 to 482 zone, the cumulative effect of the proposed project and other authorized improvements to the dam would be a reduction in potential flood damage to DPR facilities.

Nevertheless, the local sponsor, SAFCA, has indicated they will, in coordination with DPR, develop a flood response plan for existing facilities at Folsom Reservoir, and either develop and fund a program of floodproofing or create a fund for post-flood rehabilitation of existing facilities. SAFCA would provide these funds independent of the project and this effort would neither be cost-shared nor creditable to the project.

Response to Comment CDPR-10

Coordination with the Bureau and Placer County Water Agency (PCWA) is ongoing. There are no conflicts currently identified since these projects do not overlap chronologically. As the Bureau's restoration project moves forward, the interaction of these projects will be further evaluated to ensure no impacts to the Bureau's restoration project.

Response to Comment CDPR-11

Section 7.2, "Geology, Seismicity, and Soils," and Section 7.8, "Vegetation," includes an evaluation of the effects on vegetation around Folsom Reservoir as a result of the occasional inundation at elevations greater than 466 feet. The evaluation concluded that inundation is not expected to result in slope failure, erosion, or substantial vegetation mortality. Page 7-8 of the Draft SPFR/EIS/EIR includes a recommendation that the Corps implement a monitoring and adaptive management program that would monitor the effects on vegetation attributable to inundation and compensate for the loss of vegetation after such an event. This program was recommended by the USFWS in the Coordination Act Report for this project (Attachment 3 in Appendix 2). Chapter 5, "Flood Control Alternatives," has been updated to include this recommendation as an environmental commitment. Although operation of the Folsom Dam raise alternatives is not expected to adversely affect vegetation around Folsom Reservoir, and in particular well established vegetation, the adaptive management program will ensure that in the event vegetation is adversely affected, measures will be implemented to mitigate inundation effects.

DPR would be consulted in the development of and review the results of the vegetation monitoring, adaptive management and mitigation program.

Response to Comment CDPR-12

The USFWS generally recommends that unavoidable habitat losses be mitigated through habitat creation. However, land acquisition could be pursued in lieu of habitat creation if USFWS concurs with this approach. The project sponsors will coordinate closely with DPR in developing the final mitigation plan.

Response to Comment CDPR-13

Approximately 0.3 acres of wetland will be unavoidably impacted by the project. As a matter of policy, Federal projects are directed to avoid any net loss of such habitat. This policy generally favors mitigation involving conversion of uplands to wetlands. However, if California Department of Parks and Recreation (DPR) can identify equivalent wetlands that are threatened by development, and the resource agencies concur that this is the most appropriate way to mitigate, the project could include acquisition of these lands as a form of mitigation. DPR would be responsible for the operation and maintenance requirements of these additional lands.

Response to Comment CDPR-14

An adaptive management plan will be developed to monitor and remediation as necessary any long-term impacts attributable to operation of the project. DPR and the Bureau will be included in the development and implementation of this plan.

Response to Comment CDPR-15

Applicable species surveys will be performed prior to the start-up of construction.

Response to Comment CDPR-16

As previously stated, the project sponsors will coordinate closely with Lake Natoma recreation and neighborhood interests, including DPR, in developing a detailed plan for the borrow operation at Mississippi Bar and the subsequent reclamation of the borrow site. The plan will include appropriate measures to avoid impacts to wildlife in the area, including control of the timing of borrow operations to protect nesting and fledging birds in the nearby heron/egret rookery.

Response to Comment CDPR-17

Please see response to Comment CDPR-14.

Response to Comment CDPR-18

The Programmatic Agreement is included in Volume II, Appendix 1B, and a copy has been provided to the Gold Fields District (GFD) of the DPR. The recommendations by GFD will be followed as a matter of course and as dictated in the Programmatic Agreement. The Corps will fully coordinate any activities on DPR lands that may have an affect on historic properties. Prior to any impact inducing activity, such as construction staging areas, borrow site excavation or inundation, areas will be surveyed, sites recorded and evaluated, and appropriate mitigation developed.

Response to Comment CDPR-19

Mississippi Bar has been partially recorded (30 acres) as CA-SAC-308 H; the entire site, because of its size, has not currently been recorded. The site has not been evaluated for

eligibility in the National Register of Historic Places; it is not considered historic. The trenches that were tested with a backhoe for geotechnical purposes failed to uncover anything except cobbles and gravel. The Corps will fully coordinate any activities on DPR lands that may have an affect on historic properties.

Adan Treganza from San Francisco State University first identified Mississippi Bar as a cultural resource in 1954. He did not fill out a site record form. The first and only form for the site was filled out and recorded in 1988 by local consulting archeologist, Dr. Susan Lindstrom. It was given the site number CA-SAC-308 H. The "H" means that Mississippi Bar is strictly a historic site. Lindstrom's site form was not for the entire property, but an isolated locus of it. The archeological Information Center at Sacramento State only wants individual loci recorded as appropriate. Their contention is that the property is too large for any one agency to assume responsibility for recording the entire site. Since the location has not been evaluated for National Register eligibility, it is not an "historic property" as defined in 36 CFR 800. Geotechnical backhoe trenching completed last spring only turned up cobbles.

The location, however, is the site of historic mining activity. Susan Lindstrom's site form has a discussion of the types of mining and dredging that took place on Mississippi Bar. According to Bureau archeologist, Jim West, the piles of dredge tailings up and down the American River are very similar and do not require recording any more detail than filling out of California State Parks site record forms. Ann Marie Medin from the State Historic Preservation Office (SHPO), on the other hand, concluded that the site might be eligible for the National Register under Criterion c. as a cultural landscape. If it were to be used for borrow material, National Register evaluation may need to be performed by a consultant with a specialty in historic mining practices. The site may be eligible for listing in the California Register.

Response to Comment CDPR-20

As previously noted, a detailed borrow/reclamation plan for the Mississippi Bar site will be created during the pre-construction, engineering, and design phase of the project. It is not expected that the borrow operation will significantly alter the existing visual quality of the area. The potential visual impacts to vegetation, because of project-induced inundation of shoreline habitat around Folsom, will be addressed as part of the adaptive management plan that will be developed to monitor and remediation as necessary any long-term impacts attributable to operation of the project. DPR and the Bureau will be included in the development and implementation of this plan.

The development of the borrow plan will include measures to avoid or mitigate for visual impacts at Lake Natoma and will be made in conjunction with DPR.

Response to Comment CDPR-21

Construction activities will not occur on the weekends during the peak summer recreation period between Memorial Day and Labor Day. The project sponsors will coordinate closely with DPR in developing a traffic management plan for the project.

Response to Comment CDPR-22

The proposed project includes measures designed to avoid, minimize and mitigate for impacts associated with project construction. The project sponsors will coordinate closely with DPR to ensure that mitigation measures for unavoidable impacts are designed to provide lasting benefits to the project area. The local sponsor (SAFCA) has also indicated an interest in working with DPR to develop restoration and enhancement opportunities that could be pursued in connection with the project.

CITY OF FOLSOM
50 Natoma Street
Folsom, California 95630

Public Works Department
Administration/Engineering

October 29, 2001

Veronica Petrovsky
U.S. Army Corps of Engineers
Sacramento District
1325 J Street, 13th Floor
Sacramento, CA 95814

SUBJECT: COMMENTS REGARDING AMERICAN RIVER WATERSHED, CALIFORNIA LONG-TERM STUDY, DRAFT ENVIRONMENTAL IMPACT REPORT

Dear Ms. Petrovsky:

Thank you for the opportunity to review the subject document. The City of Folsom Public Works Department has reviewed the document and hereby submits the following comments for consideration in the final environmental document.

The City of Folsom concurs with the Corps' assessment that, under Alternatives 3 and 4, the closure of the Dam Road for the duration of construction would divert over 16,000 vehicles per day, resulting in significant traffic impacts on Folsom roadways. Traffic data collected by the City of Folsom shows that the majority of this traffic travels between Placer and El Dorado County via Folsom Dam. If the dam were closed, this traffic would be diverted through the City of Folsom via Natoma Street, the Historic District, and Folsom-Auburn Road, resulting in substantial increases in traffic congestion. As stated in Chapter 2, page 24 of the DEIR, daily traffic volumes on the dam are projected to grow to over 18,000 vehicles per day by the completion of the dam modifications, further exacerbating the problem. COF-1

In Chapter 2, page 102, the DEIR states that "a study of the current and expected future traffic patterns shows that permanently closing the roadway would have severe effects on the local community." The title of this study needs to be cited, and the specific effects on local traffic need to be specified. COF-2

In Chapter 7, the DEIR fails to cite diverted traffic due to the dam closure as a significant impact of the project and therefore does not associate this impact with the need for Mitigation Measure T-1, which included the temporary bridge to address the impact of the diverted traffic. COF-3

The Bureau of Reclamation has expressed interest in removing public access from the dam for safety reasons, and in light of the security precautions due to heightened terrorism concerns this concept makes more sense than before. Therefore it would seem that, if a detour bridge is to be provided to mitigate the traffic impact, this bridge should be built as a permanent structure that would keep public traffic off of the dam in perpetuity. Constructing only a temporary bridge is contrary to the long-range planning goals of the primary stakeholders in this project and would represent a substantial waste of taxpayer money. COF-4 (Cont.)

The City of Folsom should have the opportunity to review any proposed roadway or traffic signal modifications which would impact city streets, and reserves the right to reject any designs which do not meet the City's design standards or operational goals. COF-5

Once again, we appreciate the opportunity to review and comment on the document. We look forward to working with the Corps of Engineers and Bureau of Reclamation to avert impacts to the City's transportation system.

Sincerely,

Gordon F. Tornberg
Assistant Public Works Director/Engineering

c: City Manager
Asst. City Manager
PW Director
M. Rackovan, PW
Chron File

mr/petrovsky.doc

Public Works (916) 355-7272 / Fax (916) 351-0525

12.3.3 COF – City of Folsom, Gordon F. Tornberg (October 29, 2001)

Response to Comment COF-1

Comment noted.

Response to Comment COF-2

The title of the study is "Traffic Impact Study for Construction of Flood-Control Improvements to Folsom Dam," prepared for the Sacramento Area Flood Control Agency by Fehr & Peers Associates, 1999. This will be included in the final report.

Response to Comment COF-3

The temporary construction bridge is a regular project feature that was formulated to make the dam raise measures whole and complete. There is no legal requirement to mitigate the effects of the closure of Folsom Dam Road. However, our analyses have shown that the economic benefits of including a bridge (reduced trip lengths, air quality impacts, etc.) outweighs the cost of the bridge.

Response to Comment COF-4

Please see Response to Comments USBR-3 and USEPA-13.

Response to Comment COF-5

The City of Folsom as well as any other interested parties will be consulted regarding all roadway modifications and changes to traffic management and their input incorporated to the extent feasible.

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
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October 19, 2000

LSAC163
03-SAC-50
American River Long Term Investigation
Notice of Preparation
SCH#2000092051

Ms. Annalena Bronson
Reclamation Board
1416 Ninth Street, Room 1601
Sacramento, CA 95814

Dear Ms. Bronson:

Thank you for the opportunity to review and comment on the Notice of Preparation for the flood control improvements inherent in carrying out the Congress authorized American River Long Term Investigation in the Water Resources Development Act of 1999 (Public Law 106-53). Our comments are as follows:

- The DEIR should identify the impacts and mitigation measures for all bridge locations along the main stem of the Lower American River below Folsom Dam under various release conditions. Specifically, impacts to the Folsom, Hazel Avenue, Sunrise Boulevard, Watt Avenue, Howe Avenue, J Street and Interstate 5 Bridges should be examined. Our concerns involve the preservation of local bridge stability (ie. scour impacts) at several American River locations in the path of the various water releases, given high water levels with "varied velocity" flow scenarios. (It should also be noted that this project increases the maximum "step release" capacity to 180,000 cubic feet per second (cfs) above the current 160,000 cfs maximum Folsom Dam "emergency release".) Modeled water levels and velocities should be provided with each release scenario to establish whether bridge abutments will be submerged and scoured while in the waterway. CT1-1

- Please provide our office with the hydraulic model and studies used to assess existing conditions at each bridge and proposed conditions at each bridge under each alternative scenario. This information should show existing and proposed conditions.

  - Changes in velocity
  - Changes in water surface elevations
  - Changes in riverbed elevations

  The analysis should address the potential impacts to each bridge due to: CT1-2

  - Changes in velocity
  - Changes in water surface elevations
  - Changes in bridge scour at the piers; effects of contraction; and effects of degradation.

  Please provide the hydraulic model or models used (dates of input data, etc.); cross-section location plan view overlays and topography for each alternative; backup scour calculations at each bridge; and plans and methods for mitigating potential impacts to the transportation infrastructure. CT1-2 (Cont.)

- Our comments (see enclosed letter of August 18, 2000) regarding a related project sponsored by the Sacramento Area Flood Control Agency entitled, "Flood Control Improvements Along the Main Stem of the American River", are still pending and apply to the same section of the Lower American River as the American River Long Term Investigation. CT1-3

Please provide our office with the requested information and the DEIR for this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 324-6642.

Sincerely,

ORIGINAL SIGNED BY:

JEFFREY PULVERMAN, Chief
Office of Regional Planning

c: Katie Shulte Joung, State Clearinghouse

bc: Steve Balog, Office of Traffic Operations-Sacramento
Bill Lindsey, HQ Structures
Steve Ng, HQ Structures
Nick Burmas, HQ Structures
Richard Hunt, HQ Structures (Maintenance)
Bill Costa, HQ Transportation Planning Program
Dennis Jagoda, Hydraulics
Jim Philipp, Hydraulics
Bruce de Terra, SACOG Liaison
Susan Wilson, SACOG Liaison
Ken Champion, District 3 - Sacramento County LDR Coordinator

12.3.4 CT1 – California Department of Transportation – Office of Regional Planning, Jeffrey Pulverman (October 19, 2001)

Response to Comment CT1-1

The Federally supportable plan is raising Folsom Dam. If any of the variants of the Stepped Release Plan were to be selected, additional analysis would be needed to evaluate the impacts of higher flows on bridges and other infrastructure in the floodway. Since the Federally supportable plan relies on an increase in storage rather than flow, there will be no downstream impacts. However, there will be a benefit by reducing the frequency of flows greater than the objective release.

Response to Comment CT1-2

See Response to Comment CT1-1. Since the Federally supportable plan relies on increased storage rather than increased flow, the plan will allow dam operators to maintain the existing 115,000 cfs objective release for a broader range of flood events. As a result, the plan will not adversely affect hydraulic conditions at the bridges in the lower American and Sacramento Rivers.

Response to Comment CT1-3

See Response to Comment CT1-1.

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF TRANSPORTATION
DISTRICT 3, SACRAMENTO AREA OFFICE - MS 41
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October 29, 2001

01SAC0150
03-SAC-50
Lower American River Long Term Investigation
DEIS/DEIR
SCH#2000092051

Ms. Annalena Bronson
Reclamation Board
1416 Ninth Street, Room 1601
Sacramento, CA 95814

Dear Ms. Bronson:

Thank you for the opportunity to review and comment on the DEIS/DEIR and long term study materials addressing flood control improvements relating to the American River Long Term Investigation for the Water Resources Development Act of 1999 (Public Law 106-53). Our comments are as follows:

- The DEIS/DEIR documents should clearly assess whether potential bridge impacts on the lower American River from pier scour and destabilization damage could occur from the highest "approved" release scenarios at river locations below Folsom Dam. Please clarify what high velocity step releases have been approved as a part of this project and how sustained they will be. We need to know what the "highest approved" anticipated flow at peak release under the selected alternative is going to be, in order for an accurate assessment to be achieved with measured "worst case conditions" at several bridges that could experience significant impacts. CT2-1

  Caltrans considers "a significant impact" to be any actions (ie. caused by "project induced changes in river flow management" below the dam) that would change bridge stability, cause pier scour or cause any changes in managing and maintaining the downstream bridges or the Interstate 5 (I-5) riverfront seal slab system.

- Our prior comments in our letter of October 19, 2000 (enclosed) still apply "if" design releases during flood season (ie. 180,000 and 160,000 cfs) are increased and levees are raised to accommodate "more flow" downstream of Folsom Dam. Detailed modeling information, as requested in our letter, has not yet been provided. CT2-2

- Although Page 7-3 paragraph 1 states that a maximum of 160,000 cfs "can be released on a limited emergency basis, without causing a downstream levee failure and flooding in Sacramento" under "Alternative 1: No Action" conditions, the documentation does not say if such a release has ever actually been experienced since the dam was constructed. Can a time frame be placed on the "limited emergency basis" scenario (ie. 4 hours to a full 24 hour day)? Is this an expected water accumulation from a 100 or 200 year storm emergency at this maximum approved "emergency release" from Folsom Dam? Will significant bridge impacts (pier scour, destabilization, erosion, etc.) occur under this "limited emergency release" scenario, even if the levees are not damaged? Is this an accepted action in the selected alternative? CT2-3

- We wish to know the cumulative downstream effects (below Folsom Dam) of all flood control projects since 1986, proposed and otherwise approved, combined with projects previously authorized---to ascertain whether American River bridges have (1) higher or less risk of catastrophic water impacts, and (2) higher or less risk of pier scour and destabilization based on planned water releases. CT2-4

- On DEIS/DEIR Pages 4-18 and 4-19, the references to "associated infrastructure (modifications)" with emergency releases (paragraph 5), and "additional work" and "downstream hydraulic mitigation work" (paragraph 3) should all be clarified and specific in addressing needed bridge modification (ie. bridge raising) and strengthening measures (ie. added piles and pier armoring).

  For example, at the closest bridges to Folsom Dam (ie. Folsom Bridge, Hazel Avenue) and at those bridges with the lowest elevation above the American River river bed, (ie. Howe Avenue, etc.), will approved high stage water surface elevations and high velocity releases pose more harm to their structural integrity than other bridge locations, as a result of the project changes to the Folsom Dam and raising the levees? CT2-5

- Which bridge structures may be affected by high velocity flows is the responsibility of the project proponents to list along with "before" and "after" studies. Several State and local bridges are in the path of American River water releases and might be affected by high volume flows (ie. Folsom Bridge, Hazel Avenue, Sunrise Blvd., Watt Avenue, Howe Avenue, State Route 51- "Business 80", State Route 160, Interstate 5, CT2-6

and the Tower Bridge). These bridges should be identified for potential mitigation in the documentation. An increase in flow velocities will directly increase local pier scour and this issue needs to be examined to make certain structural integrity is not threatened. CT2-6 (Cont.)

- A financing plan to address how identified bridge mitigation and strengthening measures at the highest risk locations could be funded should be discussed in the EIR documentation. CT2-7

- Increases in proposed flood water conveyance could result in an increase to the maximum water surface elevation (WSEL) along the American River. Besides a brief discussion of the Howe Avenue bridge, the documentation does not clearly state the ramifications to all bridge structures along the river in relation to any WSEL changes.

  If the WSEL cannot clear the soffit of any bridge, then pressure flow will occur at that particular bridge and increase the depth of scour. The documentation has not addressed, at each bridge location on the lower American River below the dam with a recent inspection, which bridges can withstand such an increase in scour. Another result could be backwater effects, which may lead to overtopping of the upstream bank and concurrent flooding. CT2-8

- More analysis is requested to address potential bridge and WSEL problems. It should be determined whether potential increases in WSEL on the American River might also affect the Sacramento River a short distance downstream from the confluence. Caltrans is responsible for the maintenance of the riverfront seal slab----in pumping Sacramento River water----based on an established critical flood elevation and water pumping capacity that affects the "boat section" of the subterranean Interstate 5 freeway and its system of wells and retaining walls near the central business district of Sacramento. CT2-9

- Any "bridge raising" on Howe Avenue and at other downstream American River bridges below Folsom Dam to safely allow high velocity releases, as referenced on Pages 4-19 and 7-145, should be in coordination with Caltrans and local agencies. CT2-10
  Among several considerations, the contemplated bridge improvements should address (1) whether vehicular travel can still be maintained during bridge construction (ie. partial closure), (2) the bridge project duration, and (3) traffic operation measures (ie. detour routes) within a proposed Traffic Control Plan. This plan would help alleviate severe traffic disruption and delays on nearby State Route 50 prior to the construction phase of these improvements. CT2-11

- During extremely high velocity water release flood control scenarios, a separate Traffic Control Plan is recommended to discuss which lower American River bridges would be most adversely affected and identify which bridges should not carry traffic at such times and reroute traffic to alternate detour routes. CT2-12

We recommend a meeting of staff from the Reclamation Board, Sacramento Area Flood Control Agency, the City of Sacramento, Sacramento County, and Caltrans to discuss the issues raised in this letter. If you have any questions regarding these comments, please contact Ken Champion at (916) 324-6642, who will also facilitate an appropriate meeting date, time and location. CT2-13

Sincerely,

JEFFREY PULVERMAN, Chief
Office of Regional Planning

c: Katie Shulte Joung, State Clearinghouse
Tim Washburn, Sacramento Area Flood Control Agency
Veronica Petrovsky, U.S. Army Corps Of Engineers

12.3.5 CT2 – California Department of Transportation – Office of Regional Planning, Jeffrey Pulverman (October 29, 2001)

Response to Comment CT2-1

See Response to Comment CT1-1. The objective release will remain 115,000 cfs.

Response to Comment CT2-2

See Response to Comment CT1-1.

Response to Comment CT2-3

The highest outflow from Folsom Dam was 134,000 cfs which occurred during the peak of the 1986 flood. This was about a 50-year event. Under both the with and without project conditions, when inflow and storage exceed the design capacity of the dam, releases are increased in accordance with the emergency release diagram and can be much greater than 160,000 cfs. During a 200-year flood under the No Action Alternative, the objective release of 115,000 cfs would be maintained until it dam operators conclude, based on reservoir storage and projected inflows, that the flood is likely to exceed the design capacity of the system. At that point, flows would be raised to 160,000 cfs for up to 6 hours to allow for evacuation of the floodplain. The 160,000 cfs release is thus not the objective release, but rather the maximum flow that the downstream levees can contain for a short duration in an emergency. The Federally supportable plan will reduce the frequency of these damaging flows.

Response to Comment CT2-4

All of the project constructed or authorized for construction focus on increasing or optimizing storage in Folsom Reservoir. These projects will cumulatively decrease the frequency that flows will exceed 115,000 cfs and thereby provide a net benefit to the downstream bridges.

Response to Comment CT2-5

See Response to Comment CT1-1.

Response to Comment CT2-6

See Response to Comment CT1-1.

Response to Comment CT2-7

See Response to Comment CT1-1.

Response to Comment CT2-8

See Response to Comment CT1-1.

Response to Comment CT2-9

See Response to Comment CT1-1.

Response to Comment CT2-10

See Response to Comment CT1-1.

Response to Comment CT2-11

See Response to Comment CT1-1.

Response to Comment CT2-12

Comment noted.

Response to Comment CT2-13

A meeting of the joint agencies was proposed to discuss comments from CalTrans on the impacts of increased water releases on bridge stability for all bridges below Folsom Dam. After conversations with Ken Champion at CalTrans, it was determined by Mr. Champion that since the recommended plan was a dam raise plan and not one of the stepped-release plans, there was no longer a need for the meeting.

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

Norm Covell
AIR POLLUTION CONTROL OFFICER

October 25, 2001

Ms. Veronica Petrovsky, Environmental Planner
U.S. Army Corps of Engineers
Sacramento District
1325 "J" Street, 13th Floor
Sacramento, CA 95814

RE: AMERICAN RIVER WATERSHED, CALIFORNIA – DRAFT SUPPLEMENTAL PLAN FORMULATION REPORT/ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT

Dear Ms. Petrovsky:

Thank you for referring this document to the staff of the Sacramento Metropolitan Air Quality Management District (District) for review and comment. Our comments are as follows:

This will be a large construction project with the potential for generating significant emissions of reactive organic gases (ROG) and nitrogen oxides (NOx), which are precursors to the formation of ozone; as well as carbon monoxide (CO) and particulate matter PM_{10} and $PM_{2.5}$.

Sacramento County and the surrounding region have been designated by the Federal Environmental Protection Agency (EPA) as a "severe" non-attainment area for ozone. This classification is due to recurrent exceedances of the health based air quality standards of the Federal Clean Air Act.

The 1994 State Implementation Plan (SIP) requires that the area under the jurisdiction of the District achieve "attainment" by 2005. In order to reach attainment by the prescribed date, the District committed to reducing emissions from construction emissions by two tons of oxides of nitrogen (NO_x) per day.

For areas under the jurisdiction of Sacramento County, a 15 percent emissions reduction (compared to a "base" project) is required to mitigate the impact of significant projects. Due to the scale of this project we recommend that an emission mitigation and monitoring strategy, achieving an emission reduction of at least 20%, be required. The strategy should include measures for all dam/levee modifications in the construction phases of the project. SMAQMD-1

The Draft EIS/EIR indicates that one of the emission reduction strategies involves the purchase of NOx credits. While this strategy is allowable, there is no guarantee that sufficient credits will be available for purchase when they are needed. The final EIS/EIR should account for this possibility and provide alternatives for achieving emission reductions SMAQMD-2

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www.airquality.org

The following mitigation measures are recommended for reducing emissions from off-road heavy-duty engines. These measures have been accepted and implemented by the County of Sacramento for construction projects within its jurisdiction.

1. Category 1: Reducing NOx emissions from off-road diesel powered equipment

   The prime contractor shall provide a plan for approval by the Army Corps of Engineers demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, will achieve a fleet-averaged 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average; and

   The prime contractor shall submit to the Army Corps of Engineers a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the prime contractor shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. SMAQMD-3

and:

2. Category 2: Controlling visible emissions from off-road diesel powered equipment

   The prime contractor shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the Army Corps of Engineers shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supercede other SMAQMD or state rules or regulations. SMAQMD-4

3. The provisions of District Rule 403 – Fugitive Dust will apply to this project. Basically, this rule requires that steps be taken to reduce particulate emissions during any dam modification and/or construction phases of the project. SMAQMD-5

4. The use of "Lubrizol" as a fuel for diesel-powered equipment is also recommended, and could be used to help comply with Category 1 (above). This alternative fuel operates in any diesel engine, was recently certified by the California Air Resources Board, and is commercially available. Use of this fuel in a diesel engine will reduce NOx emissions by 14% and PM_{10} emissions by 63%. Questions regarding the use of Lubrizol should be directed to Mr. Tom Swenson, at the District Offices, by calling (916) 874-4889. SMAQMD-6

5. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from the Sacramento Metropolitan Air Quality Management District (District) prior to operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the District early to determine if a permit is required, and to begin the permit application process. Other general types of uses that require a District permit include dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions. For further information about permit requirements, contact the District office by calling (916) 874-4800. SMAQMD-7

Should you have any questions regarding these comments, please call me at (916) 874-4885, or pstafford@airquality.org.

Sincerely,

Phil Stafford
Associate Air Quality Planner

cc: Ron Maertz, SMAQMD

L:\Mobile\Landuse\Folsom Dam

12.3.6 SMAQMD – Sacramento Metropolitan Air Quality Management District, Phil Stafford (October 25, 2001)

Response to Comment SMAQMD-1

The Corps has agreed to implement additional mitigation measures requested by the Sacramento Metropolitan Air Quality Management District (SMAQMD). Those measures are described in the October 25, 2001, letter from Phil Stafford (SMAQMD) sent to Ms. Veronica Petrovsky with the Corps. Two follow up phone conversations to discuss details of the October 25th letter were held with Phil Stafford and Tom Swenson, also with the SMAQMD.

Based on the results of those conversations, the SMAQMD would like to see additional construction mitigation measures that include the use of 1996 or newer vehicles and the use of low NO_X fuels capable of achieving 14% or better NO_X reduction as compared to diesel fuel vehicles.

The SMAQMD also indicated that implementation of these measures is considered best management practices and that purchasing emission offsets would not be necessary. Consequently, the Corps will implement these measures in lieu of obtaining emission offsets.

For areas under the jurisdiction of Sacramento County, a 15% emissions reduction (compared to Alternative 1, no project) is required to mitigate the impact of significant projects. Due to the scale of the proposed project, the SMAQMD would like to see an emissions reduction of at least 20%. In lieu of obtaining emission offsets, the Corps has agreed to require 1996 or newer vehicles for 50% of the vehicle fleet and to require the use of low NO_X fuels for all vehicles where it is feasible. With these mitigation measures in effect, project emissions will be reduced by more than the 20% required by SMAQMD, as shown in Table 7-15 (unmitigated project emissions) and Table 7-15 (mitigated project emissions).

The emissions shown in Table 7-15 have been re-estimated to reflect several changes, including phasing of construction operations that reduce the amount of overlap and the associated daily emissions, and revised emission factors for barge operations based on a review of U.S. Environmental Protection Agency (USEPA) documents. The analysis was also updated to reflect a refined construction schedule for Alternative 3. This includes operating barges on Lake Natoma and Folsom Reservoir no longer than 4 hours per day and construction would occur no longer than 190 days per year.

Response to Comment SMAQMD-2

Please see Response to Comment SMAQMD-1.

The SMAQMD has indicated that implementation of the mitigation measures listed in SMAQMD-1 are considered best management practices and that emission offsets would not be necessary. Consequently, the Corps will implement these measures in lieu of obtaining emission offsets.

Response to Comment SMAQMD-3

The Corps will implement the mitigation measures described in the response to comment SMAQMD-1.

Response to Comment SMAQMD-4

The Corps will implement the mitigation measures described in the response to comment SMAQMD-1.

Response to Comment SMAQMD-5

The Corps will implement and abide by the PM10 dust recommendations provided by the SMAQMD. The Corps will fully comply with District Rule 403- Fugitive Dust.

Response to Comment SMAQMD-6

The Corps will require the use of low NO_X fuels for all vehicles where it is feasible. The Corps will work with the SMAQMD to determine the vehicles for which low NO_X fuels are feasible. The use of low NO_X fuels will reduce NO_X emissions by 14% and PM10 emissions by 63% for vehicles where it is used.

Response to Comment SMAQMD-7

The Corps will implement and abide by the recommendations provided by the SMAQMD under comment SMAQMD-5. Currently the emission sources cited by the SMAQMD in comment SMAQMD-7 are not included as part of the project.

County of Yolo

625 Court Street, Room 204 Woodland, California 95695 (530) 666-8195 FAX (530) 666-8193

October 22, 2001

Sacramento Area Flood Control Agency
Attn: Butch Hodgkins, Executive Director
1007 7th Street, 5th Floor
Sacramento, CA. 95814

State Reclamation Board
Attn: Pete Rabbon, General Manager
1416 9th Street, Room 1601
Sacramento, CA. 95814

U.S. Army Corps of Engineers
Attn: Colonel Michael Conrad Jr.
1325 J Street
Sacramento, CA. 95814

Subject: Draft American River Long-Term Study EIR/EIS

Dear Gentlemen,

The purpose of this letter is to convey the strong support of the Yolo County Board of Supervisors for the selection of either Alternative 2 or 3 in the Draft American River Long-Term Study EIR/EIS as the Preferred Alternative. The two Alternatives described in the draft EIR/EIS would greatly benefit flood control within the Yolo Bypass by detaining additional flows behind a larger Folsom Dam. This would provide better protection for farmland protected by the Yolo Bypass levees, as well as the Cities of West Sacramento, Davis, and Woodland. In addition, either of the two Alternatives would also benefit the City of Woodland's flood control efforts, by reducing the amount of water within the Yolo Bypass during a peak storm event.

On May 18, 1999, the Board adopted Resolution No. 99-191 regarding position statements on future flood control improvements along the Lower American River. Both Alternatives 2 and 3 are consistent with the positions previously adopted by the Board regarding flood control along the Lower American River. They would not result in any incremental increase in flooding for either the Sacramento River or the Yolo Bypass, but would result in benefits to levee maintenance efforts along the Sacramento Weir and Yolo Bypass, by holding back additional flows in the upper American River Watershed and reducing flood levels downstream during major inundation events. YCB-1

The Yolo County Board of Supervisors agrees with the Study's determination that either Alternative 2 or 3 should be the preferred alternative. Each is economically justified and has a Federal Interest, as well as broad regional support. The Board of Supervisors also encourages

SAFCA to pursue the environmental enhancement efforts described in the five restoration alternatives. YCB-1 (Cont.)

Thank you for the opportunity to comment on the Draft Study. If you have any questions about the issues discussed in this letter, please contact David Morrison, Assistant Planning and Public Works Director, by e-mail at david.morrison@ccm.yolocounty.org or by phone at (530) 666-8041. Your cooperation in achieving a mutually acceptable solution to this difficult problem has been greatly appreciated.

Sincerely,

Tom Stallard, Chair,
Representative – District 3

David Rosenberg, Vice-Chair
Representative – District 4

Lynnel Pollock
Representative – District 5

Mike McGowan
Representative – District 1

Lois Wolk
Representative – District 2

12.3.7 YCB – County of Yolo, Tom Stallard, David Rosenberg, Lynnel Pollock, Mike McGowan, and Lois Wolk (October 22, 2001)

Response to Comment YCB-1

The Corps recognizes the County of Yolo Board of Supervisors' (YCBs) support for Alternatives 2 and 3 as the preferred alternative because both alternatives would provide better flood protection to areas within Yolo County. The Corps understands that both Alternatives 2 and 3 are consistent with the positions previously adopted by YCB regarding flood control along the Lower American River. In addition, the Corps acknowledges YCB's encouragement to pursue the ecosystem restoration alternatives.